FIG. 1.

TRANSMITTING DEVICE — 12

TRANSMITTING DEVICE — 12A

NETWORK — 16

RECIPIENT DEVICE — 20

RECIPIENT DEVICE — 20A

100 K Ω

1 M Ω

+5V

FLASH MEMORY — 36

32

38

34

FIG. 3.

FIG. 2.

PACKAGE
INFORMATION — 40

↓

ENCRYPT
INFORMATION — 42

↓

SEND — 44

FIG. 4.

45

RECEIVE — 46

↓

DECRYPT
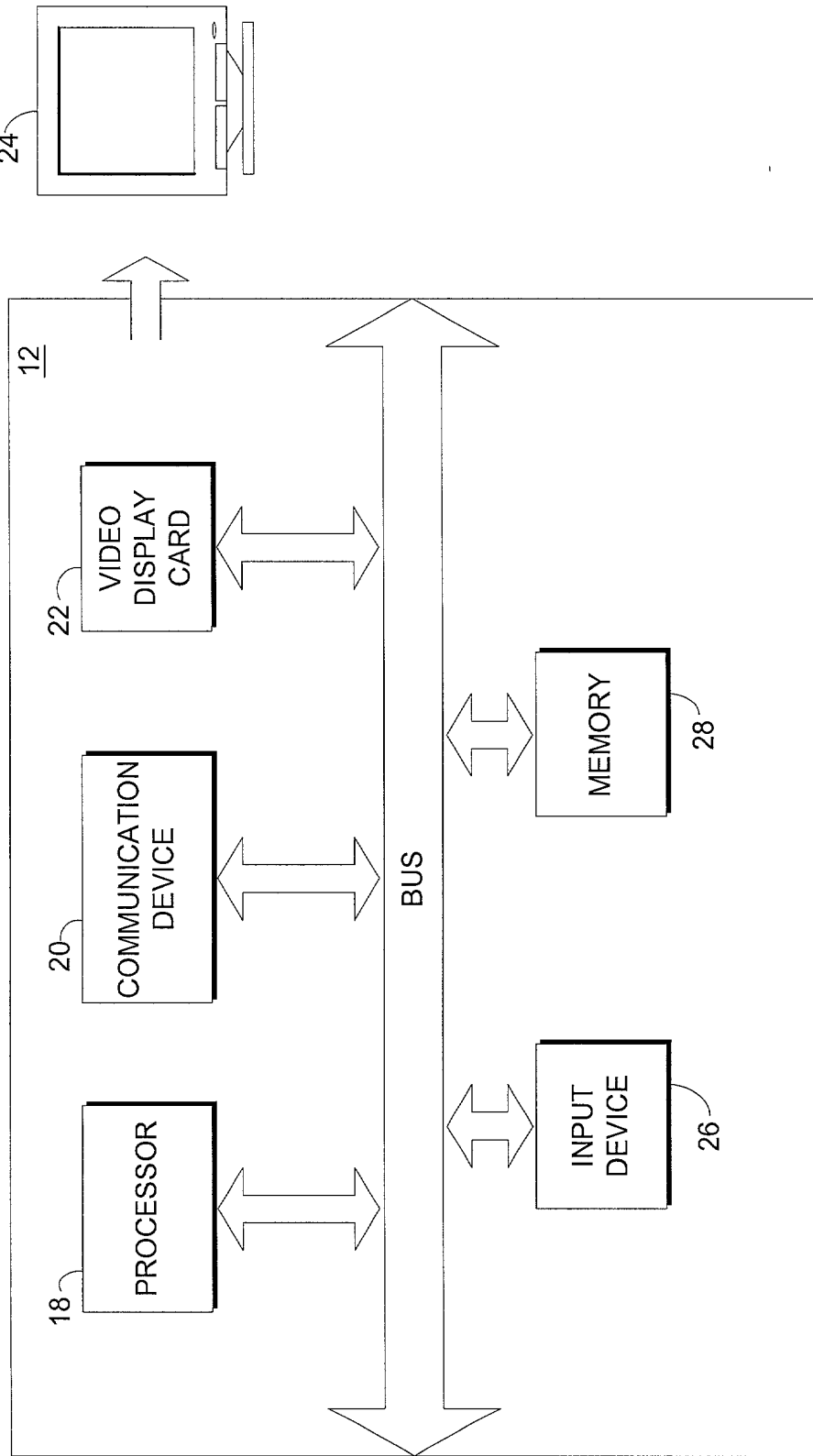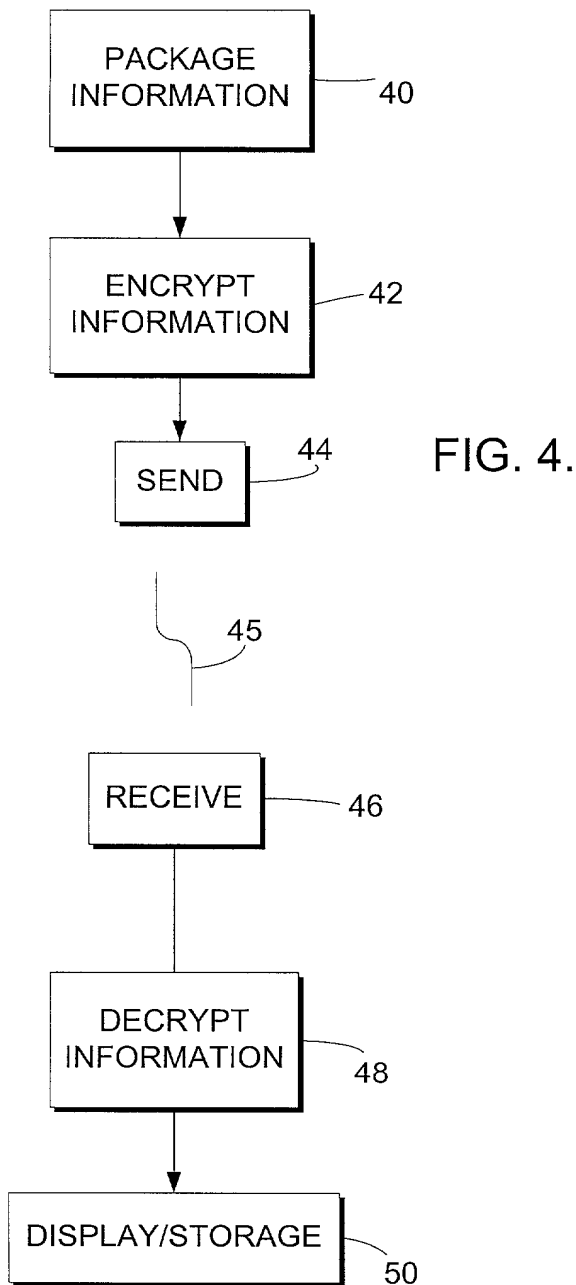INFORMATION — 48

↓

DISPLAY/STORAGE
50

| USER ACCOUNT KEY |
| RECIPIENT ACCOUNT KEY |
| SENDER DEVICE AUTHENTICITY |
| RECIPIENT DEVICE AUTHENTICITY |
| DATE AND MESSAGE NUMBER |
| CERTIFICATE OF AUTHENTICITY |

MASTER KEY SUB-COMPONENTS

FIG. 6.

GENERATE NEW USER ACCOUNT NUMBER — 502

ACCEPT USER ENTRY OF ACCOUNT NUMBER AND VERIFY (UAN) — 503

DEVICE TYPE ? — 504

SENDER

RECIPIENT

CREATE USER ACCOUNT KEY (UAK) — 506

CONNECT TO RECIPIENT DEVICE — 507

TRANSMIT UAN — 508

N

RECEIVE RAK FROM RECIPIENT ? — 510

Y

SEND UAK — 512

EXCLUSIVE - OR UAK WITH RAK — 514

N

RECEIVE UAN FROM SENDER — 516

Y

TRANSMIT RAK — 518

N

RECEIVE UAK — 520

Y

EXCLUSIVE - OR UAK WITH RAK — 522

DETERMINE MAK AND STORE INTO LOCAL FLASH MEMORY — 524